

wheat or other cereals, which have been preceded by clean and deep cultivation. Flax has long had the reputation of being a very exhausting crop to the soil, and in many cases in the old country, it is absolutely excluded, or so fenced in by conditions, as to amount practically to exclusion. This, no doubt arose, in great measure, from the old practice of cropping land too frequently with flax, thereby lowering its standard of fertility in much the same way as thousands of acres of originally productive soils in Canada have been reduced by the too frequent repetition of wheat. But there can be nothing *peculiarly* exhausting in flax; all crops—especially the cereals, are exhausting,—particularly when the grain and straw are sold, and not returned in any form to the land. If flax is allowed to ripen, and both seed and fibre taken away, it becomes, no doubt, a “scouring” crop, particularly so if it has been heavy; but the same remark is more or less applicable to wheat, rye, turnips, potatoes, &c. If the seed of flax be used in the feeding of cattle, though the whole of the straw may be sold off the farm, the increased richness of the manure will go far to restore to the soil those elements of fertility which the crop removed. It is generally considered advisable by some to grow flax on the same land more frequently than once in ten years; not because it exhausts the soil more than other crops, but because flax cannot be produced at short intervals.

In Belgium, where this crop is cultivated extensively and with great skill and attention, it usually follows a grain crop, particularly oats. The following rotations are mentioned with approval by the committee of the *Society for the promotion and improvement of the growth of flax in Ireland*—

A rotation that would bring flax once in ten years:—First year, potatoes; second, barley, laid down with grasses; third year, cut and ploughed; fourth year, pasture; fifth year, oats, or the one half might be better in flax, the other in oats; so that, with the return of the rotation, which would be five years, the land could be put on the ground which, in the ordinary course, was under grain, throwing an interval of ten years between the flax crops

coming into the same ground. A gentleman of much practical knowledge, recommends the following as being the most profitable:—

1. Oats, after grass and clover; 2. flax, pulled in August: then ploughed and harrowed in with 2 cwt. of guano, and 2 cwt. of gypsum, (plaster), then sown with rape; 3. potatoes or turnips, well manured; 4. wheat sown in spring, with clover and rye grasses; 5. hay and clover; grazing; 7. oats; 8. flax, and winter vetches; guano as before mentioned; 9. parsnips, well manured; 10. barley, sown with rye-grass and clover; 11. clover and hay; 12. grazing; 13. oats. In Belgium where the climate is warm and dry, somewhat resembling that of Canada, the two following rotations, with slight occasional modifications, are considered good:—1. potatoes; 2. wheat; 3. rape; 4. oats; 5. Flax, with grass seeds; 6. grass seeds; 7. barley. On the better sorts of light lands, not well adapted for wheat, we find: 1. rye and turnips; 2. oats; 3. roots, (parsnips or carrots); 4. rye and turnips; 5. flax; 6. grass seeds. In Ireland the practice is somewhat similar. The following represents the prevailing rotations in the best flax growing districts:—1. roots, (potatoes or turnips); 2. wheat; 3. flax with grass seeds; 4. seed hay; 5. grasses grazed; 6. grasses grazed; 7. oats; 8. flax. Or: 1. oats; 2. flax; 3. roots; 4. wheat with grass seeds; 5. grass seeds cut; 6. grass seeds grazed.

*Special Manure for Flax.*—Recent chemical investigations have shown that the fibre of flax does abstract from the soil certain matters, although not in so large a proportion as several other commonly cultivated crops. To supply to the soil all the matters which the plant requires, with the exception of what is abstracted by the seed, which should be returned by saving the latter, and applying the manure of the cattle fed upon it, or an equivalent, if the seed be sold, so as to leave the land in the same state of fertility as before, the following compound has been proposed by Professor Hodges, of Belfast, (who has devoted much attention to these matters), as a manure which may be sown broadcast on the land, prior to the last harrowing before sowing.